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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/072,266

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Kenji Fukasawa

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EXAMINER

CASCHERA, ANTONIO A

ART UNIT

PAPER NUMBER

2676

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7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/072,266

Applicant(s)

FUKASAWA, KENJI

Examiner

Antonio A Caschera

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4.6</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in the pending application.

Specification

2. The disclosure is objected to because of the following informalities:
 - a. Reference number 24 located on page 11, paragraph 38 should be changed to 34 as the referenced "control unit" of Figure 4 is labeled with number 34 (see "control unit" of Figure 4 and page 11, paragraph 38 of specification).

Appropriate correction is required.

Claim Objections

3. Claims 1, 2, 4, 12, 14, 15 and 32 are objected to because of the following informalities:
 - a. In reference to claims 1, 12 and 14, these claims recite the phrase, "...said output control data relating to respective of said plurality of output devices," (see for example, lines 7-8 of claim 1) which the office believes should instead read, "...said output control data relating to said plurality of output devices respectively..."
 - b. In reference to claims 2 and 15, these claims recite the phrase, "...identifying information for identifying respective of said plurality of output devices," (see for example, lines 2-3 of claim 2) which the office believes should instead read,

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“...identifying information for identifying said plurality of output devices respectively...”

c. In reference to claims 4 and 32, the word “the” in the phrase, “...selected from the group of classifications...” should be replaced with “a” to read, “...selected from a group of classifications...” (see for example, lines 3-4 of claim 4).

Appropriate corrections are required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 25 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 25 recites the limitation "said output control data" in lines 5-6. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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5. Claims 1, 2, 4, 9-11, 13, 14, 15, 17 and 22-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Ogawa et al. (U.S. Patent 6,603,506 B2).

In reference to claims 1, 13 and 14, Ogawa et al. discloses an image-sensing apparatus and control method which automatically recognizes an external device for which video image data is transferred to and generates the data to an external device format (see column 1, lines 40-44). Ogawa et al. discloses the image-sensing apparatus to comprise of an image-sensing unit conventionally known as a digital camera (see column 1, lines 13-14, column 3, lines 10-11 and #10a of Figure 1). Ogawa et al. also discloses the image-sensing device and external device, or printer, establishing communication between one another using the communication-protocol management modules (see column 4, lines 23-26 and #10f and 11f of Figure 1). Such communication allows for a printer-control code generating module to receive printer information which is designated to each printer available for communication and describes each printer's printing parameters/conditions (see column 4, lines 26-29 and 33-40, column 3, lines 34-39, #10g of Figure 1 and Figure 2). Note, the office interprets the communication-protocol management and printer-control modules of the image-sensing device to be functionally equivalent to the output control data acquisition mechanism of applicant's claims. Ogawa et al. discloses the image-sensing apparatus processing the image data in view of the specific printer-control information and outputting printer code data to the printer for printing (see column 4, lines 36-46 and column 5, lines 64-65).

In reference to claims 2 and 15, Ogawa et al. discloses all of the claim limitations as applied to claims 1 and 14 respectively above in addition, Ogawa et al. discloses the printer-

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control information including output device identifying information such as printer type name and resolution settings (see column 3, lines 34-39).

In reference to claims 4 and 17, Ogawa et al. discloses all of the claim limitations as applied to claims 2 and 15 respectively above in addition, Ogawa et al. discloses the printer-control information including output device identifying information such as printer type name and resolution settings (see column 3, lines 34-39). Note, as seen in Figure 2 of Ogawa et al., the printer information is stored in rows related to a specific printer model name (see #20a of Figure 2 and column 3, lines 34-39).

In reference to claims 9 and 22, Ogawa et al. discloses all of the claim limitations as applied to claims 1 and 14 respectively above in addition, Ogawa et al. discloses the printer-type table to be stored in a table in memory (see column 3, lines 22-39 and #10e of Figure 1). Ogawa et al. also discloses that the image-sensing device determines printer-control codes by accessing the printer-type management table stored in memory (see column 4, lines 36-40).

In reference to claims 10 and 23, Ogawa et al. discloses all of the claim limitations as applied to claims 1 and 14 respectively above in addition, Ogawa et al. discloses the printer sending printer-type information to the image-sensing apparatus using the communication protocol management module (see column 4, lines 33-35). Note, the office interprets the output devices to inherently generate their control data. Ogawa et al. also discloses the printer-control code generating module generating printer control codes using the received printer information (see column 4, lines 36-40).

In reference to claims 11 and 24, Ogawa et al. discloses all of the claim limitations as applied to claims 1 and 14 respectively above in addition, Ogawa et al. discloses the image-

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sensing apparatus to comprise of an image-sensing unit conventionally known as a digital camera (see column 1, lines 13-14, column 3, lines 10-11 and #10a of Figure 1) which the office interprets as inherently performing the graphics data generating and acquiring techniques of claims 11 and 24.

In reference to claim 25, claim 25 is equivalent in scope to the combination of claims 1, 2, 10 and 11 and is therefore rejected under the same rationale.

In reference to claim 26, claim 26 is equivalent in scope to the combination of claims 13, 15, 23 and 24 and is therefore rejected under the same rationale.

In reference to claim 27, claim 27 is equivalent in scope to the combination of claims 14, 15, 23 and 24 and is therefore rejected under the same rationale.

In reference to claim 28, claim 28 is equivalent in scope to the combination of claims 12, 15, 23 and 24 and is therefore rejected under the same rationale.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3, 5, 6, 12, 16, 18, 19 and 29-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al. (U.S. Patent 6,603,506 B2) in view of Otake (U.S. Pub 2001/0024292 A1).

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In reference to claims 3 and 16, Ogawa et al. discloses all of the claim limitations as applied to claims 1 and 14 respectively above. Although Ogawa et al. discloses the image-sensing device receiving printer information which is specific to each printer available for communication and describes each printer's printing parameters/conditions (see column 4, lines 26-29 and 33-35, column 3, lines 34-39, #10g of Figure 1 and Figure 2), Ogawa et al. does not explicitly disclose a designating mechanism configured to designate more than one output device for output of the graphics data however Otake does. Otake discloses an image output control apparatus which is connected to an input device and plural output devices (see paragraph 18 of Otake). Otake discloses an image controller which is connected to a scanner and multiple printers and transfers image data input by the scanner to the plurality of printers (see paragraphs 128-129). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the image-sensing control methods of Ogawa et al. with the multiple output device image data distribution techniques of Otake in order to decrease the amount of time needed for output devices to produce copies of image data in a "cluster" copying environment by distributing jobs to multiple printers to disperse the work (see paragraph 5 of Otake).

In reference to claims 5, 6, 18 and 19, Ogawa et al. and Otake disclose all of the claim limitations as applied to claims 3 and 16 above in addition, Ogawa et al. discloses the printer-control information including output device identifying information such as printer type name and resolution settings (see column 3, lines 34-39). Note, as seen in Figure 2 of Ogawa et al., the printer information is stored in rows related to a specific printer model name (see #20a of Figure

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2 and column 3, lines 34-39) which the office interprets as equivalent to the output control data referenced to a classification level as stated in applicant's claims.

In reference to claims 12, 29, 33, 34 and 38, Ogawa et al. discloses an image-sensing apparatus and control method which automatically recognizes an external device for which video image data is transferred to and generates the data to an external device format (see column 1, lines 40-44). Ogawa et al. discloses also discloses the apparatus having a plurality of programs for connecting the apparatus to a plural types of external devices (see lines 1-3 of abstract) which the office interprets equivalent to the computer-executable program of applicant's claim. Ogawa et al. discloses the image-sensing apparatus to comprise of an image-sensing unit conventionally known as a digital camera (see column 1, lines 13-14, column 3, lines 10-11 and #10a of Figure 1) which the office interprets as inherently acquiring graphics data. Ogawa et al. also discloses the image-sensing device and external device, or printer, establishing communication between one another using the communication-protocol management modules (see column 4, lines 23-26 and #10f and 11f of Figure 1). Such communication allows for a printer-control code generating module to receive printer information which is designated to each printer available for communication and describes each printer's printing parameters/conditions (see column 4, lines 26-29 and 33-40, column 3, lines 34-39, #10g of Figure 1 and Figure 2). Note, the office interprets the communication-protocol management and printer-control modules of the image-sensing device to be functionally equivalent to the output control data acquisition mechanism of applicant's claims. Ogawa et al. discloses the image-sensing apparatus processing the image data in view of the specific printer-control information and outputting printer code data to the printer for printing (see column 4, lines 36-46 and column 5, lines 64-65). Although Ogawa et

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al. discloses the image-sensing device receiving printer information which is specific to each printer available for communication and describes each printer's printing parameters/conditions (see column 4, lines 26-29 and 33-35, column 3, lines 34-39, #10g of Figure 1 and Figure 2), Ogawa et al. does not explicitly disclose a designating mechanism configured to designate more than one output device for output of the graphics data however Otake does. Otake discloses an image output control apparatus which is connected an input device and plural output devices (see paragraph 18 of Otake). Otake discloses an image controller which is connected to a scanner and multiple printers and transfers image data input by the scanner to the plurality of printers (see paragraphs 128-129). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the image-sensing control methods of Ogawa et al. with the multiple output device image data distribution techniques of Otake in order to decrease the amount of time needed for output devices to produce copies of image data in a "cluster" copying environment by distributing jobs to multiple printers to disperse the work (see paragraph 5 of Otake). Further note, in reference to claims 29, 33, 34 and 38, the office interprets that the printer-control code generating module inherently determines whether received printer information is different from what is already stored in the printer-type management table as Figure 2 of Ogawa et al. discloses that newly received printer information is added to the table. Ogawa et al. further discloses performing image data processing based on the printer-type information corresponding to a specific output device or printer (see column 4, lines 40-46).

In reference to claims 30 and 35, Ogawa et al. and Otake disclose all of the claim limitations as applied to claims 29 and 34 respectively above in addition, Ogawa et al. discloses the printer-type table to be stored in a table in memory (see column 3, lines 22-39 and #10e of

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Figure 1). Ogawa et al. also discloses that the image-sensing device determines printer-control codes by accessing the printer-type management table stored in memory (see column 4, lines 36-40).

In reference to claims 31 and 36, Ogawa et al. and Otake disclose all of the claim limitations as applied to claims 30 and 34 respectively above in addition, Ogawa et al. discloses the printer-control information including output device identifying information such as printer type name and resolution settings (see column 3, lines 34-39). Further, the office interprets that the printer-control code generating module inherently determines whether received printer information is different from what is already stored in the printer-type management table as Figure 2 of Ogawa et al. discloses that newly received printer information is added to the table.

In reference to claims 32 and 37, Ogawa et al. and Otake disclose all of the claim limitations as applied to claims 30 and 34 respectively above in addition, Ogawa et al. discloses the printer-control information including output device identifying information such as printer type name and resolution settings (see column 3, lines 34-39). Note, as seen in Figure 2 of Ogawa et al., the printer information is stored in rows related to a specific printer model name (see #20a of Figure 2 and column 3, lines 34-39). Further, the office interprets that the printer-control code generating module inherently determines whether received printer information is different from what is already stored in the printer-type management table as Figure 2 of Ogawa et al. discloses that newly received printer information is added to the table. The printer information listed in the printer-type management table is used in processing the image data in a specific manner to be formatted for the designated output printer.

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7. Claims 7, 8, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al. (U.S. Patent 6,603,506 B2).

In reference to claims 7 and 20, Ogawa et al. discloses all of the claim limitations as applied to claims 4 and 17 respectively above. Although Ogawa et al. discloses an output device category to include printers (see column 3, lines 34-39 and Figure 2), Ogawa et al. does explicitly disclose a display device category however, since Ogawa et al. does disclose a possible embodiment wherein the output device is a PC (see column 9, lines 7-14), the office believes that it would have been obvious to one of ordinary skill in the art at the time the invention was made to include an output device category of display devices, as Ogawa et al. already discloses outputting the image data to a PC, in order to provide the image-sensing device with display device conditions allowing for the generation of optimal displayable image data.

In reference to claims 8 and 21, Ogawa et al. discloses all of the claim limitations as applied to claims 7 and 20 respectively above. Although Ogawa et al. discloses outputting data to printer, facsimile or display devices (via a PC) (see column 9, lines 7-14), Ogawa et al. does not explicitly disclose the output formats including xerographic printing, sublimation printing, ink jet printing, CRT display, LCD display, projection display, transmissive display, and reflective display formats. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include the above specific output formats in the image-sensing device of Ogawa et al.. Applicant has not disclosed that supporting these specific output formats provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the printer and facsimile output formats of Ogawa et al. because the office

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interprets the exact output format that image data is transformed into to be a matter of design choice as preferred by the designer and to which best suits the applicant at hand. Further, the specific manner in which the image data is ultimately displayed or printed is seen to provide no immediate criticality to the application at hand. Therefore, it would have been obvious to one of ordinary skill in this art to modify Ogawa et al. to obtain the invention as specified in claims 8 and 21.

8. Claims 39-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al. (U.S. Patent 6,273,535 B1) in view of Otake (U.S. Pub 2001/0024292 A1).

In reference to claims 39 and 42, Inoue et al. discloses an image forming system and apparatus which can output an image under a condition suitable for the input condition of that image (see column 1, lines 38-42). Inoue et al. discloses the image forming system including a printer and digital image input device for inputting digital image data into the system, storing the image data along with additional color processing information in image memory (see columns 3-4, lines 66-18). Inoue et al. discloses the printer requesting image data from the digital camera memory which includes the additional color processing information (see column 4, lines 35-40). Note, the office interprets the printer of Inoue et al. to provide an equivalent function as the output control data acquisition device of applicant's claims provides. Inoue et al. also discloses a processing selector which selects an appropriate one of the plurality of kinds of printing control information from the printer (see column 4, lines 41-56). Inoue et al. discloses the printer to perform further color processing based on the image data and further image information received to provide optimal printing results (see column 4, lines 53-56). Inoue et al. does not explicitly disclose the image forming system connected to plurality of output devices however Otake does.

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Otake discloses an image output control apparatus which is connected an input device and plural output devices (see paragraph 18 of Otake). Otake discloses an image controller which is connected to a scanner and multiple printers and transfers image data input by the scanner to the plurality of printers (see paragraphs 128-129). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the image forming system and apparatus of Inoue et al. with the multiple output device image data distribution techniques of Otake in order to decrease the amount of time needed for output devices to produce copies of image data in a "cluster" copying environment by distributing jobs to multiple printers to disperse the work (see paragraph 5 of Otake).

In reference to claim 40, Inoue et al. and Otake disclose all of the claim limitations as applied to claim 39 above in addition, Inoue et al. discloses the additional image information to include color recommended printing parameters which the office interprets as equivalent to identifying information to identify output devices as different output devices would have different recommended printing parameters (see column 2, lines 63-65 and #13-17 of Figure 2). Inoue et al. discloses the printer to perform further color processing based on the image data and further image information received to provide optimal printing results (see column 4, lines 53-56).

In reference to claim 41, Inoue et al. and Otake disclose all of the claim limitations as applied to claim 39 above in addition, Inoue et al. discloses the possibility of connecting a monitor to the digital camera as an output device (see column 9, lines 32-39). Inoue et al. discloses that the additional image information is used in color processing relating to a printer's color reproduction (see Figure 2 of Inoue et al.) which is used by the printer to perform

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additional color image data processing to provide optimal printing results as disclosed by Inoue et al. (see column 4, lines 53-56). Since, Inoue et al. discloses additional output devices such as display devices, the office interprets Inoue et al. to inherently disclose performing output control of the display device based on the addition image information and color reproduction of the display device as all display/printer devices have unique display/printing settings which must be coordinated with input device color data.

References Cited

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- a. Nakajima (U.S. Patent 6,650,437 B1)
 - Nakajima discloses an image processing system wherein an input device transfers image data to at least one output device and carries out image output processing.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Antonio Caschera whose telephone number is (703) 305-1391. The examiner can normally be reached Monday-Thursday and alternate Fridays between 7:00 AM and 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella, can be reached at (703)-308-6829.

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Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the Technology Center 2600 Customer Service Office whose telephone
number is (703) 306-0377.



aac

6/18/04

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